

MEMORANDUM

TO: Vermont Children's Performance Indicator Project Advisory Group

FROM: John Pandiani
Brad James
Fred Ober

DATE: September 25, 1997

RE: Unduplicated Counts of Children and Adolescents Served across Service Sectors

Nancy Thomas from the Education Department called this week with three important observations about the data we have been using in our examination of mental health, SRS, and special education/EBD caseload overlap in Vermont. First, she pointed out that the special education EBD/IEP count is based on a "point in time" count while the mental health and SRS counts include everyone served in a year. If there is a lot of movement in and out of EBD/IEP status during a year, this would result in an undercount of the number of EBD/IEP children and an underestimation of the caseload overlap. Nancy also pointed out that the "Kids Count" database from which the IEP/EBD data are drawn is known to undercount the IEP caseload. Finally, Nancy pointed out that our exclusion of out-of-state placements and people in correctional facilities would also lead to an undercount.

In response to these concerns, we have adjusted our focus in two ways. First, we narrowed the focus of our analysis to include only children and adolescents served by SRS and community mental health programs during December of 1995. The education IEP database describes the December 1, 1995, caseload. Second, we expanded our focus by including children and adolescents on an IEP for EBD on December 1, 1996, and December 1, 1995, with children and adolescents served in a year by community mental health services SRS. This week's analysis incorporates both views of unduplicated counts of children and adolescents. We will send revised versions of our earlier analyses to you in the near future.

This week's report provides unduplicated numbers of children and adolescents served by any of the three service sectors for each of ten community mental health regions. The response includes unduplicated counts for both a one month period and a one year period. Next week's PIP will present a composite measure of the degree of caseload overlap across the three service sectors.

We continue to be interested in your comments on the quality of the data, the appropriateness of the analysis, and the effectiveness of the presentation of these data, as well as your interpretation of the results.

Unduplicated Counts of Children and Adolescents Served

QUESTION: How many children and adolescents were served by at least one of the three major children's services programs (mental health, SRS, and special education for an EBD) in each of Vermont's ten community mental health service areas during December 1995 and FY1996? How do the regions compare on a per capita basis?

DATA: Data on children and adolescents under 22 years of age who were served by Children's Services Programs at CMHCs in Vermont during December 1995 and FY1996 were obtained from the Quarterly Service Reports provided to the Department of Developmental and Mental Health Services (DDMHS) by the community service providers. Data items used in this analysis include program and provider codes, client date of birth, and gender. The QSR includes a provider specific person identification number but does not include a statewide unique person identifier.

Data files describing all children and adolescents who were on SRS caseload during December 1995 and FY1996 were obtained from SRS. Data items used in this analysis include student date of birth, gender, and disability code. The SRS database extract does not include a unique person identifier.

Data files describing all children and adolescents, who were on IEPs as of December 1, 1995 and December 1, 1996 were obtained from the Vermont Department of Education. These data were collected as part of the 1995 and 1996 *Child Count Data* projects. Data items used in this analysis include student date of birth, gender, and disability code. The Child Count Data Set does not include a unique person identifier although each record is a unique individual. Thirty-four children and adolescents for December 1995 and thirty-nine children and adolescents in December 1996 were excluded from the analysis for community mental health service areas because they were out-of-state, in correctional facilities, parochial schools, or home tutoring and could not be assigned to a community mental health service area. These children and adolescents were included for statewide analysis, however.

ANALYSIS: Two analytical windows are used in this analysis. The first analytical window focuses on one full year. Two databases representing children and adolescents with and EBD/IEP were obtained for the Department of Education (DOE). These two databases represented point-in-time counts for December 1, 1995 and December 1, 1996. Using *Probabilistic Population Estimation* provided an estimate of the unduplicated number of children and adolescents on an EBD/IEP during that time. This population was used with FY1996 counts of children and adolescents served by community mental health centers and SRS to provide an estimate of the number of unduplicated children and adolescents served by the three service sectors.

The second analytical window focuses on one month. This analysis used the point-in-time DOE database for children and adolescents on an EBD/IEP as of December 1, 1995. This database was combined with the December 1995 databases containing CMH and SRS clients to provide a more narrowly focused estimate of the unduplicated number of children and adolescents served by the three service sectors.

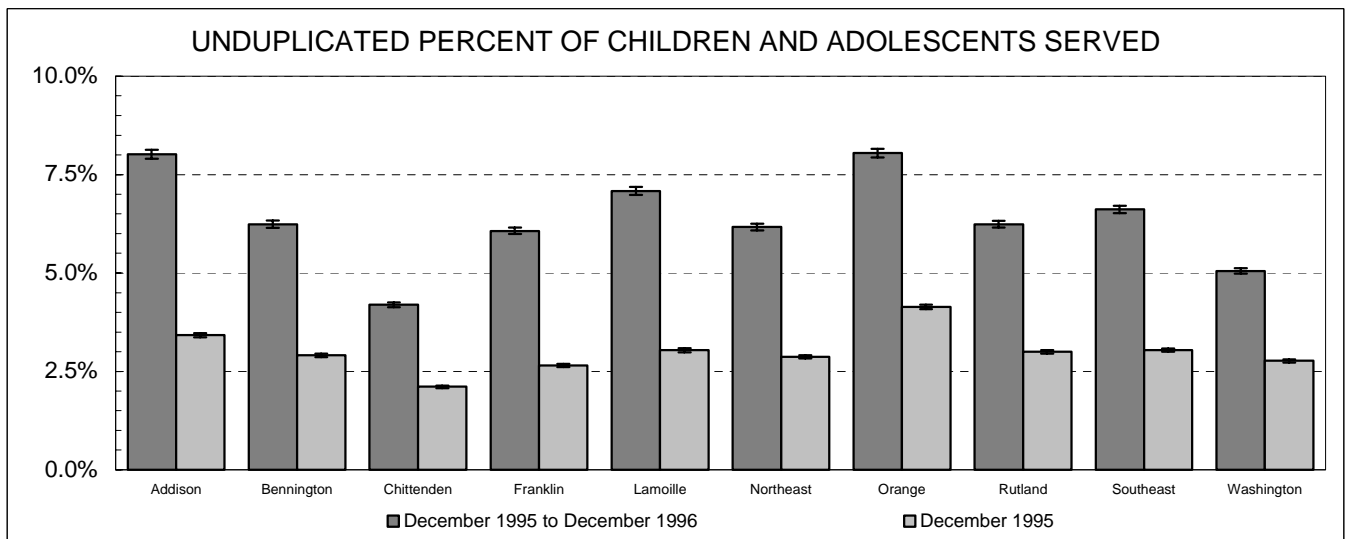
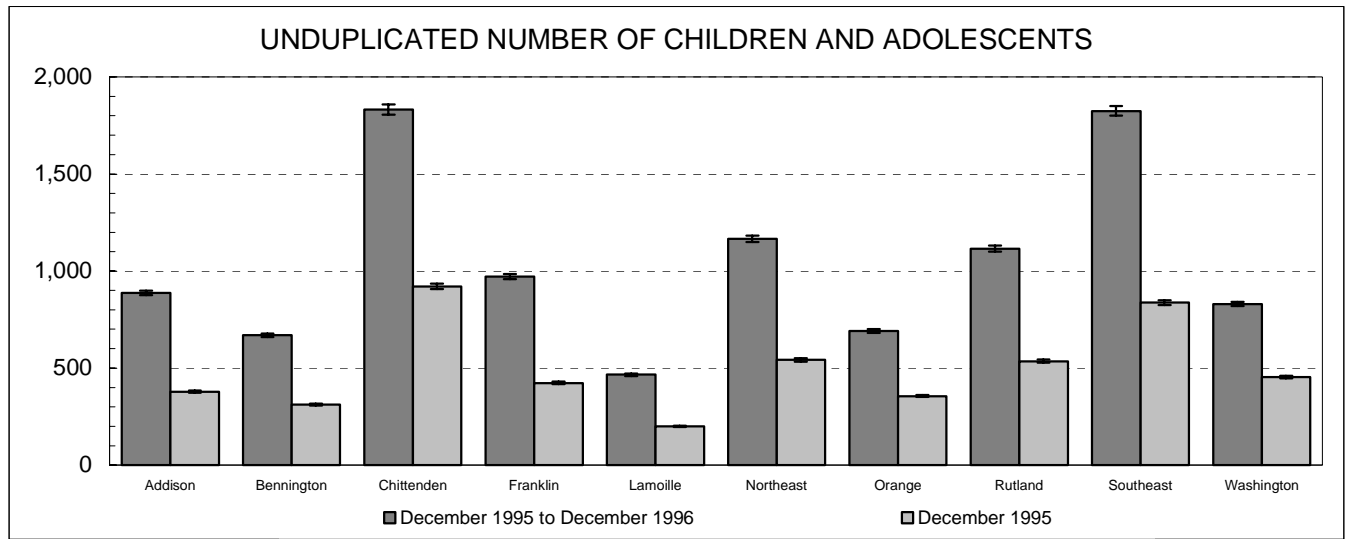
Because the three data sets do not contain a common person identifier, *Probabilistic Population Estimation* was used to derive an unduplicated number of children and adolescents represented in the data sets. Results of this probabilistic estimation are presented with 95% confidence intervals.

RESULTS: When viewing unduplicated counts across the three service sectors over a year, the Orange and Addison service areas had the highest proportion of children and adolescents served by at least one of the three service sectors during FY1996 ($8.0\% \pm 0.11\%$ each). The Chittenden service area had the lowest proportion of children and adolescents served by at least one of the three service sectors ($4.2\% \pm 0.06\%$).

When viewed in the shorter time frame, there was little relative change between the regions. The Orange service area had the highest proportion of children and adolescents ($4.1\% \pm 0.06\%$), followed by the Addison service area ($3.4\% \pm 0.05\%$). The Chittenden service area once again had the lowest proportion of children and adolescents served by at least one of the service sectors ($2.1\% \pm 0.03\%$).

NEXT QUESTIONS: Does the overall amount of overlap among mental health, SRS, and special education for an EBD caseloads vary among service areas in Vermont? Do the unduplicated counts of children and adolescents served remain relatively constant over time, or is there significant variation?

UNDUPLICATED COUNT OF CHILDREN AND ADOLESCENTS SERVED BY CMH, SRS, AND SPECIAL EDUCATION (EBD)



Region	Population ¹	Unduplicated Count of Children and Adolescents Served across Three Service Sectors ²		Percent of Children and Adolescents Served ³	
		December 1995 to December 1996	December 1995	December 1995 to December 1996	December 1995
Addison	11,078	888 ± 12	378 ± 6	8.0% ± 0.11%	3.4% ± 0.05%
Bennington	10,734	669 ± 10	312 ± 5	6.2% ± 0.09%	2.9% ± 0.05%
Chittenden	43,730	1,832 ± 26	921 ± 14	4.2% ± 0.06%	2.1% ± 0.03%
Franklin	16,016	972 ± 13	424 ± 6	6.1% ± 0.08%	2.6% ± 0.04%
Lamoille	6,588	467 ± 7	200 ± 3	7.1% ± 0.10%	3.0% ± 0.05%
Northeast	18,906	1,166 ± 17	543 ± 8	6.2% ± 0.09%	2.9% ± 0.04%
Orange	8,598	692 ± 10	356 ± 5	8.0% ± 0.11%	4.1% ± 0.06%
Rutland	17,877	1,116 ± 15	536 ± 8	6.2% ± 0.09%	3.0% ± 0.04%
Southeast	27,572	1,825 ± 25	838 ± 12	6.6% ± 0.09%	3.0% ± 0.04%
Washington	16,429	830 ± 11	455 ± 7	5.1% ± 0.07%	2.8% ± 0.04%

¹ Population figures are based on quarterly service reports submitted by Vermont's Community Service Providers for FY1996. Population figures are projections for 1995 based on the latest estimates published by the Vermont Department of Health and the Center for Rural Studies at the University of Vermont. 'Children's Population' includes people less than 22 years of age.

² Based on Probabilistic Population Estimation; includes 95% confidence interval.

³ Based on the projected number of children and adolescents in each CMH service area.